TRANSLATION

METHOD OF OBTAINING LITHIUM GREASES

By

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FOREIGN TECHNOLOGY DIVISION

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Method of Obtaining Lithium Greases

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Known is the method of obtaining lithium greases by mixing mineral oil, lithium soap, silicone liquids, esters with the introduction of antioxidizing antiwear and anticorrosion admixtures.

When cooling the ready mixture, obtained by ordinary blending, there is a sharp separation of the thickening agent from the dispersion medium, with additional mechanical processing employed to prevent this phenomenon.

But the greases obtained there when heated to the melting point of lithium soap and subsequent cooling lose the colloidal stability and break up into solid and liquid phases.

The proposed method of obtaining lithium greases differs from the known one by the use in role of stabilizers alkyl and arylsiliconates of aluminum or diphenylseter of methylphoaphinic acid.

Introduction of the mentioned stabilizers increases the stability of the grease, assures the obtainment of frost resistant (down to minus 60°), high melting (150 -180°) lithium greases on the polyorganosiloxane liquid bases.

The proposed method of obtaining lithium greases consists in the fact, that the saponifiable component -aluminum siliconate in the presence of the lubricating liquid, introduced into the grease in role of dispersion medium, is processed with an aquenous suspension of lithium hydroxide at 95-100° when stirred with periodic addition of small amounts of water.

After completing the process of saponifying the temperature is raised to 240-260° and diphenylester of methylsulfonic acid is introduced.

The obtained grease is cooled, run through a screen and rollers.

Object of Invention

Method of obtaining lithum greases on the bases of mineral oils, lithium soap, polyorganosiloxane liquid with the use of antioxidizers, anticorrosion and antiwear admixtures, distinguished by the fact that for the purpose of increasing the stability (consistancy) of the greases in the latter are introduced in role of stabilizer alkylarylsiliconates of aluminum or diphenylester of methylphosphinic acid or a mixture of same.

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